

Welcome

WAP Trainings Available During
COVID-19
And
How to Utilize These Trainings



List of Free Wx Trainings Available

Each training listed below will be explained full throughout this presentation

- ORNL Weatherization Assistant NEAT/MHEA
 - <https://www.weatherizationassistanttraining.org/>
 - <https://weatherization.ornl.gov/manuals/>
- DOE WAP Training Toolkit
 - <https://wap.litmos.com/account/login/>
- OKACAA WAP Training Center
 - <https://drive.google.com/drive/folders/1N4a9LgH9Q8kbOQFoxGv4dIxfKvVboir6?usp=sharing>

Free Wx Trainings Available, continued

Each training listed below will be explained full throughout this presentation

- MSU Weatherization Training Center (WxTV)
 - <http://www.weatherization.org/WxTvFeatured.html>
 - <http://weatherization.org/WxLive.html>
 - <http://wxtvonline.org/>
- NASCSP WAP Technical Assistance Center (WAPTAC)
 - <https://nascsp.org/wap/waptac/>
 - <https://nascsp.org/coronavirus-resources/> (on COVID-19)
- BPI Training List
 - <https://exams.bpi.org/site/en/ce/search/index/type/4>
- YouTube Training Videos

1.

ORNL Weatherization Assistant NEAT/MHEA

<https://www.weatherizationassistanttraining.org/>



United States Department of Energy

Weatherization Assistant Training

Supporting the National Energy Audit Tool (NEAT) and Manufactured Home Energy Audit (MHEA)

TRAINING | MY ACCOUNT | REFERENCE DOCUMENTS

» Home

Welcome to the Weatherization Assistant Training

Welcome to the Weatherization Assistant energy audit software training! The Weatherization Assistant is an energy audit software tool developed for the U.S. Department of Energy (DOE) Weatherization Assistance Program by the Oak Ridge National Laboratory. The Weatherization Assistant is used by states and local weatherization agencies to identify and prioritize cost-effective weatherization measures applicable to a home. The Weatherization Assistant contains the National Energy Audit Tool (NEAT) for site-built, single-family houses and the Manufactured Home Energy Audit (MHEA) for mobile homes. In addition, the Weatherization Assistant provides expanded optional capabilities that are useful in implementing and administering weatherization programs, including a work order feature. The software may be obtained from the Weatherization Assistance Program Technical Assistance Center (WAPTAC) at the following web site: www.waptac.org

The Weatherization Assistant Training was developed by the Oak Ridge National Laboratory for DOE. We developed this web-based training to teach you how to download and install the Weatherization Assistant software, setup your agency and libraries, initiate a new client, run a NEAT or MHEA audit on a house, and use the Weatherization Assistant's optional administrative features.

ORNL NEAT/MHEA online training is free and recommended for both **experienced** and **inexperienced** NEAT/MHEA users!

Caution: This training is intended for basic navigational and understanding of the software only.

Coming soon, upon DOE Approval, is an Oklahoma NEAT/MHEA User's Manual for specific guidance. ODOC guidance will supersede any training that may be in conflict with the content from Oakridge.

ORNL Weatherization Assistant NEAT/MHEA

<https://www.weatherizationassistanttraining.org/>

Browser Recommendation: Internet Explorer, Edge or Firefox

The flash player needed to watch and participate is better integrated with these browsers. Google Chrome is NOT recommended since this platform uses “Flash” player.





United States Department of Energy

Weatherization Assistant Training

Supporting the National Energy Audit Tool (NEAT) and Manufactured Home Energy Audit (MHEA)

[HOME](#) | [CONTACT US](#) | [REGISTER](#) | [LOGIN](#)

REGISTER or LOGIN

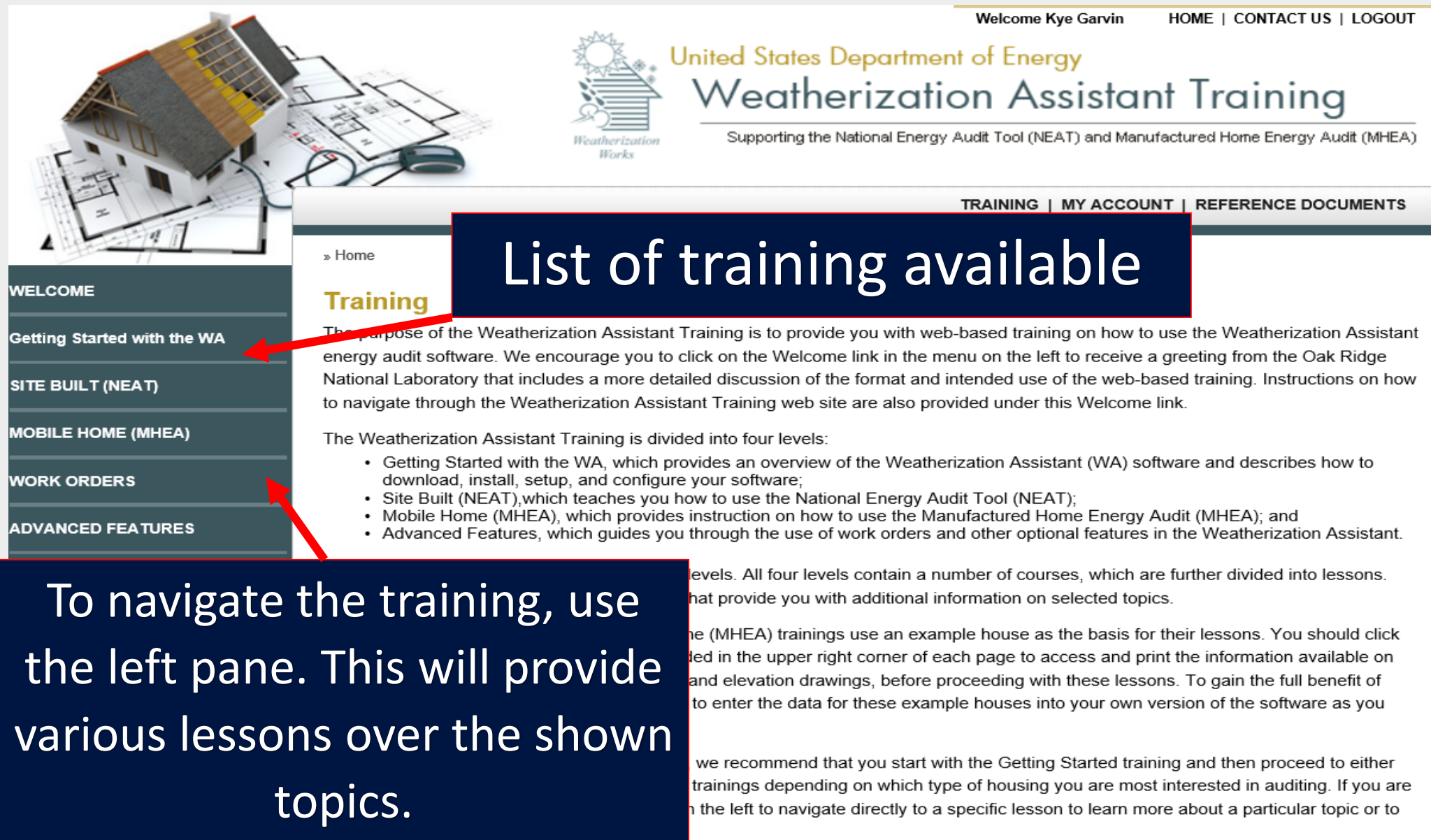
» Home

Welcome to the Weatherization Assistant Training

Welcome to the Weatherization Assistant energy audit software training! The Weatherization Assistant is an energy audit software tool developed for the U.S. Department of Energy (DOE) Weatherization Assistance Program by the Oak Ridge National Laboratory. The Weatherization Assistant is used by states and local weatherization agencies to identify and prioritize cost-effective weatherization measures applicable to a home. The Weatherization Assistant contains the National Energy Audit Tool (NEAT) for site-built, single-family houses and the Manufactured Home Energy Audit (MHEA) for mobile homes. In addition, the Weatherization Assistant provides expanded optional capabilities that are useful in implementing and administering weatherization programs, including a work order feature. The software may be obtained from the Weatherization Assistance Program Technical Assistance Center (WAPTAC) at the following web site: www.waptac.org

The Weatherization Assistant Training was developed by the Oak Ridge National Laboratory for DOE. We developed this web-based training to teach you how to download and install the Weatherization Assistant software, setup your agency and libraries, initiate a new client, run a NEAT or MHEA audit on a house, and use the Weatherization Assistant's optional administrative features.

To access the training, please **REGISTER** if you are a new user, or **LOGIN** if you are returning to the site.



Welcome Kye Garvin HOME | CONTACT US | LOGOUT

United States Department of Energy
Weatherization Assistant Training
Supporting the National Energy Audit Tool (NEAT) and Manufactured Home Energy Audit (MHEA)

TRAINING | MY ACCOUNT | REFERENCE DOCUMENTS

» Home

Training

The purpose of the Weatherization Assistant Training is to provide you with web-based training on how to use the Weatherization Assistant energy audit software. We encourage you to click on the Welcome link in the menu on the left to receive a greeting from the Oak Ridge National Laboratory that includes a more detailed discussion of the format and intended use of the web-based training. Instructions on how to navigate through the Weatherization Assistant Training web site are also provided under this Welcome link.

The Weatherization Assistant Training is divided into four levels:

- Getting Started with the WA, which provides an overview of the Weatherization Assistant (WA) software and describes how to download, install, setup, and configure your software;
- Site Built (NEAT), which teaches you how to use the National Energy Audit Tool (NEAT);
- Mobile Home (MHEA), which provides instruction on how to use the Manufactured Home Energy Audit (MHEA); and
- Advanced Features, which guides you through the use of work orders and other optional features in the Weatherization Assistant.



levels. All four levels contain a number of courses, which are further divided into lessons. That provide you with additional information on selected topics.

the (MHEA) trainings use an example house as the basis for their lessons. You should click in the upper right corner of each page to access and print the information available on and elevation drawings, before proceeding with these lessons. To gain the full benefit of to enter the data for these example houses into your own version of the software as you

we recommend that you start with the Getting Started training and then proceed to either trainings depending on which type of housing you are most interested in auditing. If you are on the left to navigate directly to a specific lesson to learn more about a particular topic or to

List of training available

To navigate the training, use the left pane. This will provide various lessons over the shown topics.



United States Department of Energy

Weatherization Assistant Training

Supporting the National Energy Audit Tool (NEAT) and Manufactured Home Energy Audit (MHEA)

TRAINING | MY ACCOUNT | REFERENCE DOCUMENTS

» Home » Getting Started with the WA » Overview of the WA

Overview of the WA

This course will familiarize you with the Weatherization Assistant energy audit software. Use the links in the menu on the left to access the lessons in this course.

The general purpose and overall design philosophy of the Weatherization Assistant is discussed in the first lesson, along with some perspectives on its limitations. The basic elements of the Recommended Measures Report generated by running a NEAT or MHEA audit are discussed in the second lesson since obtaining this report and its list of recommended measures is the goal of most users of the Weatherization Assistant software. The remaining two lessons provide an overview of how the Weatherization Assistant is organized and the various features included in the software, along with detailed instructions on how to navigate within the Weatherization Assistant and characteristics of its data fields.

WELCOME

- Getting Started with the WA
- Overview of the WA
- Purpose / Limitations**
- Measures Report Basics
- Features of the WA
- Navigating the WA
- Setting Up the WA

Familiarize yourself with the Purpose /
Limitations of the software

WELCOME

Getting Started with the WA

SITE BUILT (NEAT)

Measures Report

Starting An Audit

Shell

Heating

Heating System

Heating System Solution

Cooling

Ducts/Infiltration

Baseloads

Itemized Costs

Example Audit

Setup Library

Supply Library

MOBILE HOME (MHEA)

WORK ORDERS

ADVANCED FEATURES

Heating

The heating system is a key component in a home's energy efficiency rating. The Heating tab is used to describe all of the heating equipment used in the home. In fact, you can even use the NEAT software to enter details about more than one heating system for a single structure. Using the form, simply differentiate your entry by Equipment Type and Fuel. The sub-form will then ask for details of each heating system.

Make sure to have the information from the example site-built home printed and available for your reference with the lessons in this course.

Use the links in the left-hand menu to access the lessons in this course.

The menu expands to show various lessons for each category of NEAT and MHEA.

The screenshot displays the 'Heating System' form in the NEAT software. The form includes fields for 'System Code' (HS1), 'Heat Supplied (%)' (90), 'Primary System' (checked), 'Equipment Type' (Forced Air Furnace), 'Manufacturer', 'Fuel' (Natural Gas), 'Model', 'Location' (Heated Space), and 'Uninsulated Supply Ducts (2)'. Below these are 'Required Heating System Details' including 'GAS FURNACE DETAILS' (Input Units, Input Rating, Output Capacity: 60 kBTU/hr), 'Automatic Vent Damper' (Present/Evaluate checkboxes), and 'Replacement System' (Options: Standard Efficiency Replacement, Fuel: Natural Gas, Include in SIR: checked). A 'Run Audit' button is visible on the right, showing 'Last Run On: 9/8/2010 at 3:48 PM'.

As you can see here, the heating section for NEAT contains two lessons.

The screenshot shows the 'HEATING SYSTEM' list in the NEAT software. It features a dropdown menu for 'by System Code' and a list of systems. The first system is highlighted, showing '1' of '2' systems. Buttons for 'New', 'Copy', and 'Del' are visible. A 'Comment' field is also present. At the bottom, a note states: 'Short name of heating system (must be unique for this Job) [Default HS3 (TAB on blank field to accept)]'. The 'NUM' column is also visible.

SITE BUILT (NEAT)

Measures Report

Starting An Audit

Shell

Heating

Cooling

Ducts/Infiltration

Baseloads

Itemized Costs

Example Audit

Setup Library

Information and Parameters

Fuel Costs

Fuel Indices

Library Measures

NEAT Insulation Types

Supply Library

Setup Library

NEAT requires more than a home's description in order to select the recommended energy efficiency measures. Using the Setup Library, you customize the programs to your area by supplying fuel costs, material costs, and additional key parameters. These are values which are not expected to change house-by-house. Before running an audit for an actual client, you must visit the Setup Library Main Menu item and customize the program to your agency. This course helps you understand how to do that.

Use the links in the left-hand menu to access the lessons in this course.

SETUP LIBRARY -- SETUP LIBRARY -- SETUP LIBRARY -- SETUP LIBRARY -- SETUP LIBRARY -- SETUP LIBRARY

Library Name: Your Setup Library [Doe] References

Setup Library Information | Key Parameters | Fuel Costs (1) | Fuel Price Indices | Library Measures | User Defined Measures (0) | NEAT Insulation Types

Library Name: Your Setup Library [Doe]

Agency: ORNL State: TN

<Supply Library>: Your Supply Library [Doe]

Description:

Comment:

SETUP LIBRARY

by Library Name: [Dropdown]

1 < 1 > 1 of 1 New Copy Del

Preview Print Snapshot File

Setup Library Step by Step Guidance

*See ODOC Webinar next week for more guidance on Setup Library policy.



United States Department of Energy Weatherization Assistant Training

Supporting the National Energy Audit Tool (NEAT) and Manufactured Home Energy Audit (MHEA)

TRAINING | MY ACCOUNT | REFERENCE DOCUMENTS

WELCOME

Getting Started with the WA

SITE BUILT (NEAT)

Measures Report

Starting An Audit

Shell

Heating

Cooling

Ducts/Infiltration

Baseloads

Itemized Costs

Example Audit

Setup Library

Supply Library

» Home » SITE BUILT (NEAT)

SITE BUILT (NEAT)

The Weatherization Assistant contains the National Energy Audit Tool (NEAT) for site-built single-family houses. NEAT follows a series of steps to select the energy efficiency measures that meet a user-defined level of cost effectiveness for a particular home.

This section uses an example site-built home for all the courses and lessons. You may view and print plan and elevation drawings of the home as well as a page describing the home's systems from the links below. To get the most value from this hands-on training, we recommend that you do print these documents so you can follow along as you move through the NEAT training.

The lessons that make up each course in this level are designed to be completed sequentially, at your own pace. In addition, a number of lessons have "Learn More" videos, where you can view additional information about the topic at hand.

Once you have printed the documents below, you can use them for lessons for this Level.

NEAT Handouts:

- NEAT Example House Plan
- NEAT Example House Elevations
- NEAT Example House Systems
- Simplified Fuel Conversion

Hand-outs are also included, for printable content.



United States Department of Energy

Weatherization Assistant Training

Supporting the National Energy Audit Tool (NEAT) and Manufactured Home Energy Audit (MHEA)

TRAINING | MY ACCOUNT | **REFERENCE DOCUMENTS**

» Home » Reference Documents

Reference Documents

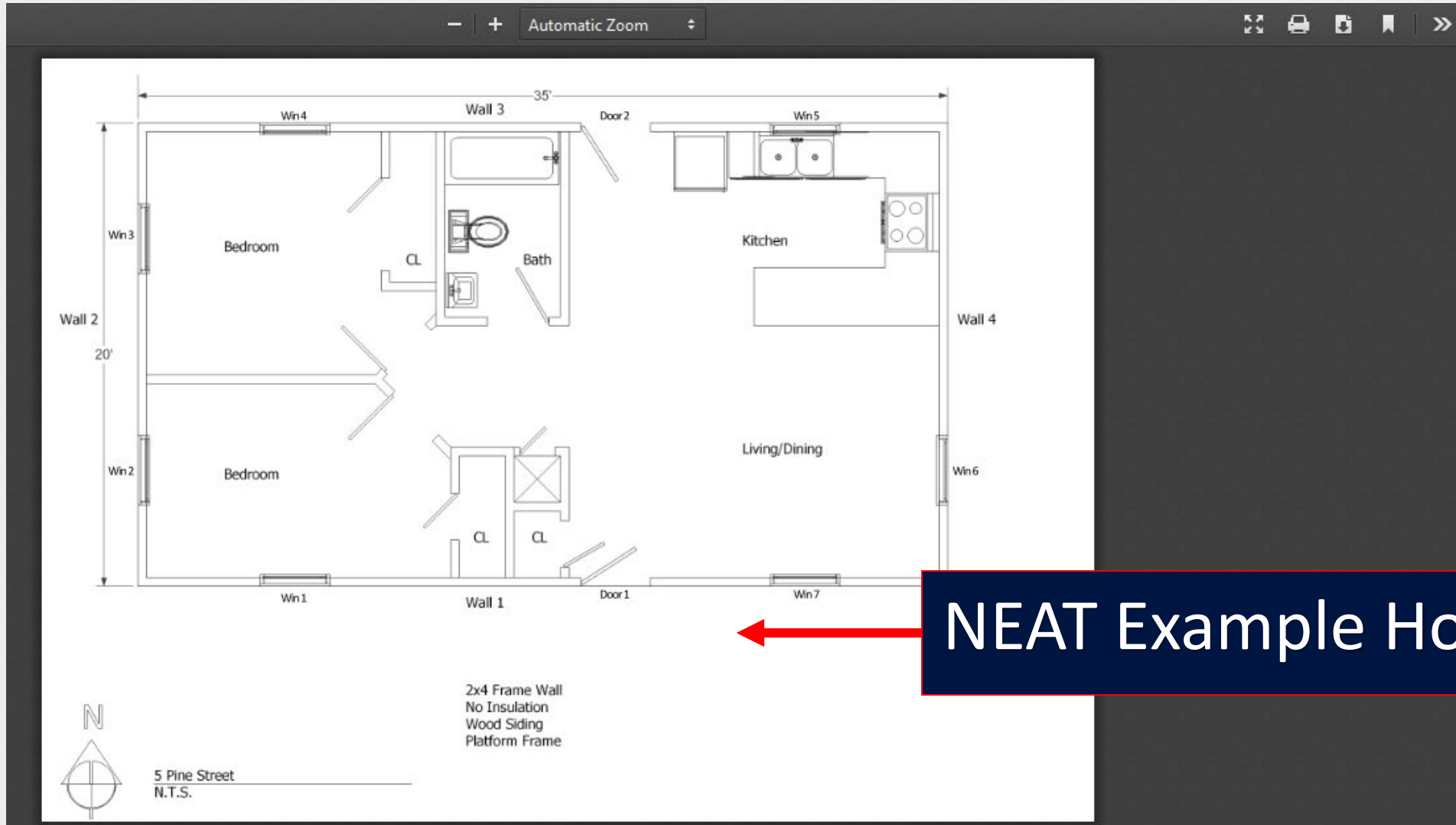
NEAT Example House Reference Documents

- NEAT Example House Plan
- NEAT Example House Elevations
- NEAT Example House Systems
- Simplified Fuel Conversion

MHEA Example House Reference Documents

- MHEA Example House Drawing
- MHEA Example House Systems
- Heating and Cooling Efficiencies Based on Manufactured Date
- Simplified Fuel Conversion

On the top right of the application there is also a link for all reference documents as helpful tools for training.



NEAT Example House Plan

MOBILE HOME (MHEA)

The menu shows the sections under the shell tab for MHEA.

MOBILE HOME (MHEA)

Measures Report

Starting an Audit

Shell

Addition

Heating

Cooling

Ducts and Infiltration

Baseloads

Itemized Costs

Example Audit

Setup Library

Supply Library

WORK ORDERS

ADVANCED FEATURES

The lessons that make up each course in this level are designed to be completed sequentially, at your own pace. In addition, a number of lessons have "Learn More"™ videos, where you can view additional information about the topic at hand.

Once you have printed the documents below, use the links in the left-hand navigation menu of this screen to access the courses and lessons for this Level. **MHEA Handouts:**

- MHEA Example House Drawing
- MHEA Example House Systems
- Heating and Cooling Efficiencies Based on Manufactured Date
- Simplified Fuel Conversion

Notice the addition tab, which is MHEA specific.

The ORNL Weatherization Assistant NEAT/MHEA trainings can be used as a refresher or for new employees who have not used this software.

The various sections can take 10-45 minutes each.

This training does not cover ODOC policy and procedure. Please reach out to ODOC or OKACAA with any questions regarding policy and procedure.

Are there any
NEAT / MHEA
Online Training
Questions?

2.


DOE Program Management Online Training

<https://wap.litmos.com>

WEATHERIZATION ASSISTANCE PROGRAM

WAP MANAGEMENT TRAINING RESOURCES

Weatherization Assistance Program Training Modules



Learning Pathway:
Client Relations

- Meet Your Clients: Client Eligibility
- Coach Your Intake Staff
- It's a Deferral, What Next?
- Managing Client Expectations

NRCC | 8

WAP ADMINISTRATIVE TRAININGS

Access [self-paced online trainings](#) designed for WAP Subgrantee staff, which are also applicable to Grantees, subcontractors, and WAP stakeholders. Use the code "waptraining" on your first visit to use the tool and follow the instructions in your email to create an account.



wap.litmos.com

Welcome to

Weatherization Assistance Program

Welcome to the Weatherization
Assistance Program (WAP)

Administrative trainings. Log in to access
free, self-paced training on implementing
WAP at the local level.

If this is your first time logging in, please
visit <https://wap.litmos.com/self-signup>
and use the code "waptraining" to create
an account.

Username

Password

☐ Show Password

☐ Remember me on this computer

Login

[I've forgotten my username/password](#)

Start Here



wap.litmos.com

Welcome to

Weatherization Assistance Program

Welcome to the Weatherization Assistance Program (WAP) Administrative trainings. Log in to access free, self-paced training on implementing WAP at the local level.

If this is your first time logging in, please visit <https://wap.litmos.com/self-signup> and use the code "waptraining" to create an account.

☐ Show Password

☐ Remember me on this computer

Login

[I've forgotten my username/password](#)

SEE HIGHLIGHTED PARAGRAPH FOR FIRST TIME USERS



wap.litmos.com/self-signup

The address bar

Fill out the registration form.
The login information will be
sent to the email that is input.

Remember to input the
code “waptraining” here.

Online Courses Self Sign Up

Register to access courses by entering the code provided to you

First Name:

Last Name:

Email:

We will send account login information to this address

Confirm Email:

Language

English ▼

Code:

waptraining

Register

The login instructions will be sent to the email provided. See example below:

An account has been created for you on the Weatherization Assistance Program training platform.

Login Details

Username: _____

To login and complete your training courses please click on the following link: <https://wap.litmos.com/login.aspx?loginkey=2a0e8f99-b7454c-b0ec->

This link will expire after first time use. After this link has been used, login at <https://wap.litmos.noclick.com>

If you are going to log into the mobile-app, please enter the following domain on the login page: wap

For Mobile Apps Only

Upon registering and receiving login information, the first login will walk through the steps of inputting personal information and setting up the password.

← → ↻ 🔒 wap.litmos.com/account/login/

Welcome to

Weatherization Assistance Program

Welcome to the Weatherization Assistance Program (WAP) Administrative trainings. Log in to access free, self-paced training on implementing WAP at the local level.

If this is your first time logging in, please visit <https://wap.litmos.com/self-signup> and use the code "waptraining" to create an account.

☐ Show Password

☐ Remember me on this computer

Login

[I've forgotten my username/password](#)

ENERGY.GOV

Office of
ENERGY EFFICIENCY &
RENEWABLE ENERGY

Weatherization Assistance Program

[Home](#)

[Content Library](#)

[Achievements](#)

You should now be able to view your dashboard

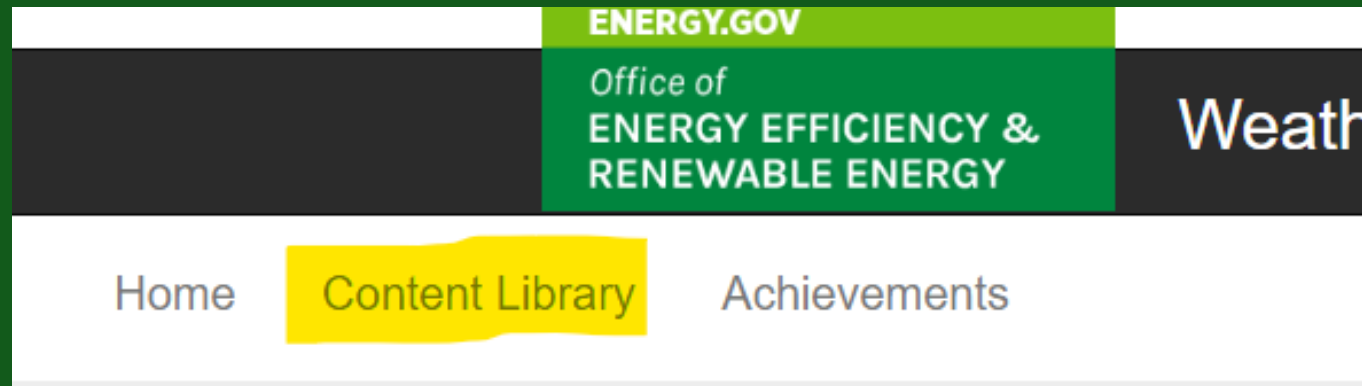
All

In Progress

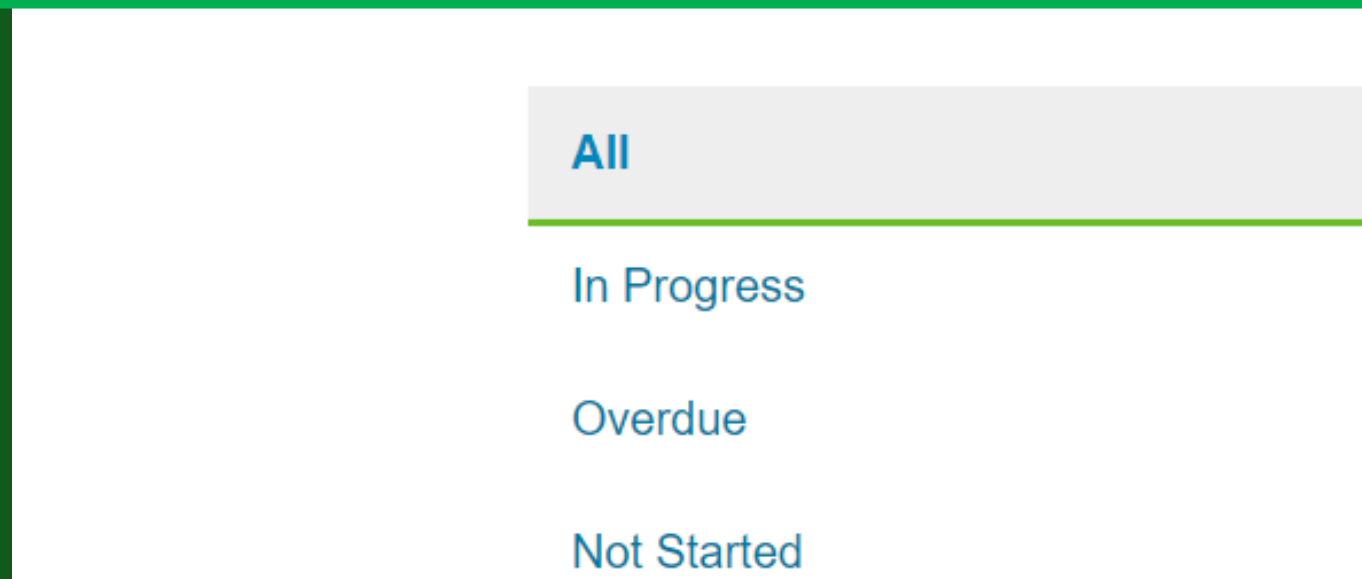
Overdue

Not Started


Completed








Click “Content Library” to view the various modules and lessons.




From the Content Library, you can navigate the various lessons and modules for training. **There are a total of 29 modules.**


 Quick Start Guide

▼Filters


-  View All
-  Courses
-  Learning Paths
-  Recently Viewed
-  Favorites




Introduction
Learning Path



Planning and Budget
Learning Path



Procurement
Learning Path






Client Relations
Learning Path

Use the pane on the left to filter the trainings.

Select a Learning Path (Group of Modules) or an Individual Training Module.

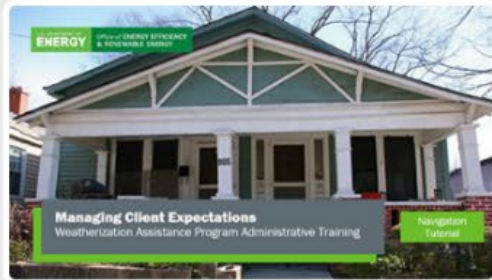
The screenshot shows a list of three training modules. Each module has a thumbnail image on the left and a title on the right. The first module, 'Managing Client Expectations', features a house with a porch. The second, 'The House as a System', shows a two-story house. The third, 'Understanding the Savings to Investment Ratio', shows a man and a woman looking at a laptop. To the right of each title is a heart icon. A red arrow points from the bottom right towards the heart icon of the first module. Another red arrow points from the bottom right towards the title of the first module.

Thumbnail Image	Module Title	Heart Icon
	Managing Client Expectations	Heart icon
	The House as a System	Heart icon
	Understanding the Savings to Investment Ratio	Heart icon

By clicking the heart, you can indicate that you have completed the module, enable to see what you've completed all in one area.

For this example, I am going to select “Managing Client Expectations”

When the training module is selected it will bring you to this page.



Managing Client Expectations

When a client has a complaint, it is generally because an expectation has not been met. Identify strategies to effectively manage client expectations and resolve challenging complaints.

Estimated time: 15 minutes



Progress

Continue this course

Start or Continue Course

Additional References

Modules

Additional References

- Managing Client Expectations ⓘ
- Course Evaluation ⓘ

You can also view the modules within the course here. You can use this to go back and review after it is completed and complete the course evaluation.

All modules will have a video to watch and interactions for the participants. Below is an example of one of the interactions.

☰

Managing Client Expectations

FEEDBACK

NEXT MODULE

EXIT

⌵

Managing Client Expectations

Managing Client Expectations

Course Evaluation

What Do You Think?

Choose a response and select Submit.

Ask a Colleague

How should I respond to Mr. Johnson?

I'm sorry the process has taken this long, Mr. Johnson. Let me bring up your file. I need to ask some questions so I can better help you.

Mr. Johnson, sometimes these applications take a while. I appreciate your patience. I will look at your file and get back to you. What's the best number to reach you?

Mr. Johnson, I can understand that you're frustrated with the situation. Let me see if there's a program director that you can speak with.

SUBMIT

▶

OKLAHOMA Commerce

Select the three lines in the upper left corner to expand the menu and see additional contents in the module.

These menu options are located in the top right corner of the screen.

This button is used to go to the next module or exit the training module.

This button is used to give technical feedback for any issues encountered during the training.

Use this button to see the individual videos or interaction screens for the module.
It can be used to navigate the course after it is completed or continue from previously completed screens.

The screenshot displays a training module titled "Managing Client Expectations". The interface includes a top navigation bar with a hamburger menu icon and the title. Below this, a video player shows a woman in an office setting. Overlaid on the video are several text boxes and speech bubbles. A green box at the top left contains the text "These menu options are located in the top right corner of the screen." with a red arrow pointing to the top right. A green box at the top right contains the text "This button is used to go to the next module or exit the training module." with a red arrow pointing to the "NEXT MODULE" button. A green box in the middle right contains the text "This button is used to give technical feedback for any issues encountered during the training." with a red arrow pointing to the "FEEDBACK" button. A green box at the bottom right contains the text "Use this button to see the individual videos or interaction screens for the module. It can be used to navigate the course after it is completed or continue from previously completed screens." with a red arrow pointing to the "MENU" button. The video content includes a text box asking "What Do You Think? Choose a response and select Submit." and a speech bubble from a character named Mr. Johnson asking "How should I respond to Mr. Johnson?". A "SUBMIT" button is visible at the bottom of the video player. The bottom of the screen features a video control bar with a play button and a progress bar. The Oklahoma Commerce logo is in the bottom right corner.

Managing Client Expectations

Managing Client Expectations

What Do You Think?
Choose a response and select Submit.

I'm sorry the
Let me bring up your file. I need to ask some questions so
I can better help you.

Mr. Johnson, sometimes t
I appreciate your patience
back to you. What's the be

Mr. Johnson, I can unders
with the situation. Let me
director that you can spea

How should I respond
to Mr. Johnson?

FEEDBACK

NEXT MODULE

EXIT

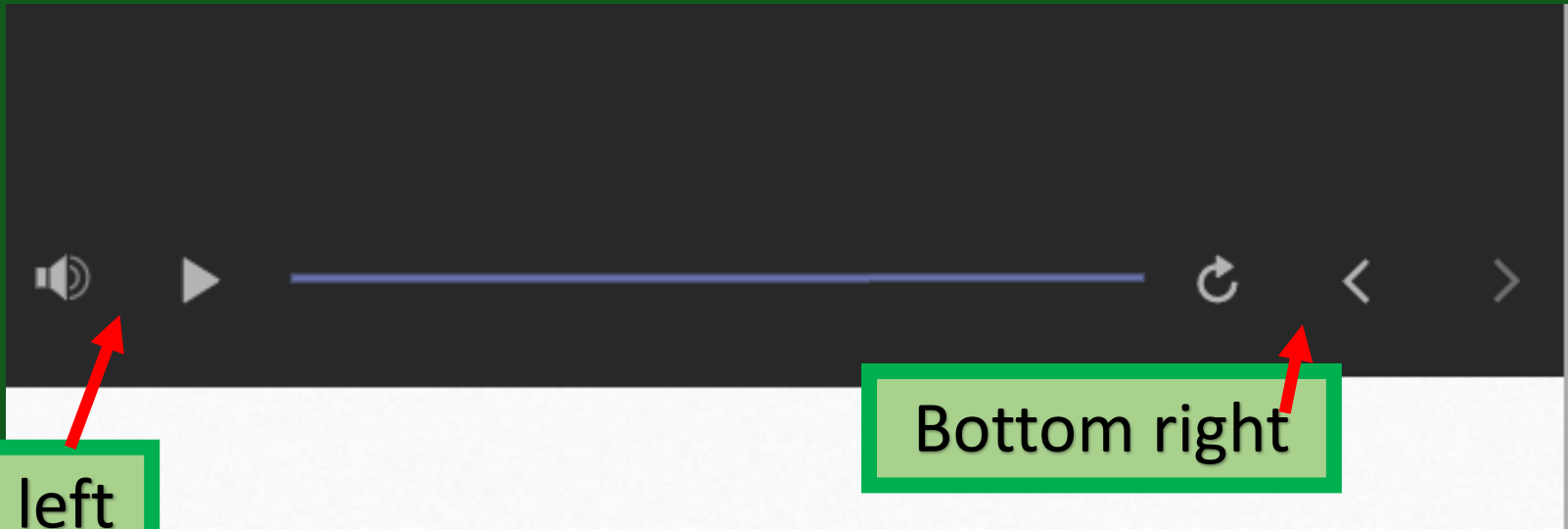
MENU

SUBMIT

OKLAHOMA
Commerce

On the bottom of the screen, both left and right sides,
are the controls for the screen.

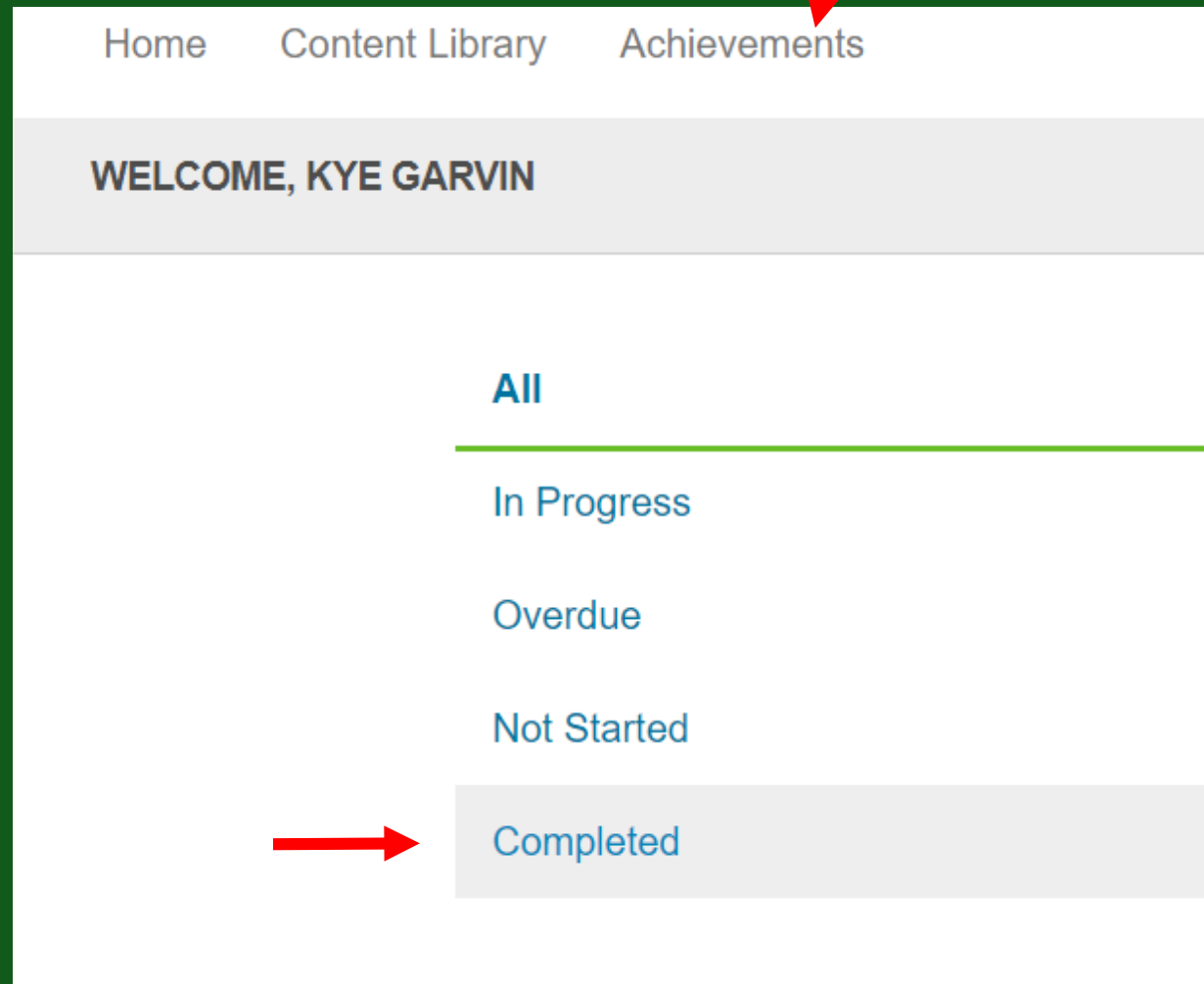
This allows you to mute, play, pause, re-play, move back, and
move forward.



Bottom left

Bottom right


Back on the Home page you can find completed modules under the **Completed** or **Achievements** tabs



Achievements tab allows access to completed certificates

Achievements

External Learning

 Search for an achievement

Multifamily Weatherization

Learning Path Achieved on 04/13/2020

The Basics of Multifamily Weatherization

[Download certificate](#) Achieved on 04/13/2020

Quality Improvement

Learning Path Achieved on 04/13/2020

Identifying Work Quality Issues

[Download certificate](#) Achieved on 04/13/2020

Maintaining Complete Job Files

[Download certificate](#) Achieved on 04/13/2020

Managing Subcontractors

[Download certificate](#) Achieved on 04/10/2020

Certificate of Completion

Awarded to:

Your Name

In recognition of completing the following Weatherization Assistance
Program Administrative Training:

The Basics of Multifamily Weatherization

..

The DOE WAP trainings can be used as a refresher or for new employees.

The various sections can take 15-30 minutes each.

This training is designed for WAP admin staff but can be very helpful for technical staff also.

Explore the various courses and modules and decide what is right for your staff.

OKACAA is designing a WAP Program Manager Training based on the information provided from these modules, so this is valuable information for WAP staff who will be attending in the future.

This training does not cover ODOC policy and procedure. Please reach out to ODOC or OKACAA with any questions regarding policy and procedure.

Are there any
DOE Program Management
Online Training
Questions?

4.

OKACAA Weatherization Hands-On Activities Within Curriculum



Google Drive

[Google Drive: Sign-in](https://drive.google.com/drive/?tab=wo1)

<https://drive.google.com/drive/?tab=wo1>

Access **Google Drive** with a free **Google** account (for personal use) or G Suite account (for business use).

<https://drive.google.com/drive/folders/1N4a9LgH9Q8kbOQFoxGv4dIxfKvVboir6?usp=sharing>

OKACAA Weatherization Hands-On Activities Within Curriculum

To quickly access information, refer to the “Table of Contents” found in front of each component.

Weatherization Scope Table of Contents - Component 1

• DOE/NREL Job Task Analysis (JTA)	Energy Auditor	Page 2
• DOE/NREL Job Task Analysis (JTA)	Quality Control Inspector	Page 3
• DOE/NREL Job Task Analysis (JTA)	Crew Leader, Installer	Page 4
• BPI Weatherization Scope	BPI 1200-S-2017	Page 5
• Weatherization Process	General Knowledge	Page 6
• Promoting Weatherization	General Knowledge	Page 7
• Client Communication	General Knowledge	Page 8
• Client Interview: Client Energy Usage/Potential Health & Safety Issues	DOE, General Knowledge	Page 9
• Client File Checklist, Wx Application, Priority Needs	ODOC	Page 10-11
• Unit Conversions, Determining Client Energy Usage	ODOC	Page 12
• Baseloads, Peak loads, Heating Degree Days (HDD's)	ODOC	Page 13
• Cost Benefit Analysis and Energy Bill Averaging	BPI 1200-S-2017	Page 14
• Income Guidelines – DOE and DHS	DOE/DHS	Page 15
• Building History: Structure Age & Improvements	ODOC and DOE	Page 16
• Historical Significance	SHPO, ODOC	Page 17,18
• Energy Auditor, QCI Role & BPI Exam Requirements	DOE / ODOC / BPI	Page 19-22
• BPI Exam Requirements - EA & QCI Recertification's	BPI	Page 23-24
• Crew Leader Role and BPI Exam Requirements	DOE / ODOC / BPI	Page 25-26
• Retrofit Installer Role and BPI Exam Requirements	DOE / ODOC / BPI	Page 27-28
• Training and Certification Requirements	ODOC	Page 29-32

BPI Knowledge and Action Requirements

National Guidance: BPI 1200: Attics

10.1.5.1 [Attic/Roof Type](#): Note the attic or roof type(s) (e.g., rafter/joist, truss, vaulted ceiling), and location of the thermal boundary. When feasible, note location and condition of the pressure boundary and the moisture barrier.

10.1.5.2 [Existing Attic/Roof Venting](#): Note any intentional attic or roof venting, and note whether each space is unconditioned, semi-conditioned (unintentionally conditioned), or fully conditioned.

10.1.5.3 [Existing Attic Insulation](#): Note the presence, type, listed R-value (if available) and effective R-value, of any insulation in the attic (e.g., floor joists), as well as any degradation or installation issues with existing

[Insulation](#): Note the presence, type, listed R-value (if available) and effective R-value of insulation between conditioned and unconditioned spaces) or gable walls that are part

[Areas to Determine Insulation](#): Where there is no attic access it may be necessary to inspect the attic or vaulted ceiling using a combination of methods (e.g., visual inspection, thermal imaging, and/or non-destructive imaging) to determine insulation

[Thermal Bypasses](#): Note any thermal bypasses observable from the attic, such as chases to conditioned space, and note likely transition areas for leakage including wall-to-floor transitions, changes in ceiling height, chimney/duct chases,

[Barriers](#): When home energy upgrades for attic insulation are proposed, indicate the surface area(s) and construction type, thickness, type, and performance characteristics (e.g., perm rating) of insulation. Also note features such as chimneys, combustion venting, recessed light fixtures, and/or exhaust fans that need repair or exterior venting. Note any floored/enclosed areas to be insulated, and specify treatment separately from non-floored areas.

10.4.2 [Solar Gain](#): Evaluate the potential for energy savings of shading and solar-reflectance upgrades for the attic, roof and/or wall.

10.1.5.7 [Action Required - Thermal Barrier, Pressure/Air Barrier, and Moisture Barriers](#): Insulation recommendations shall be based on the building's moisture barrier, thermal barrier, air barrier, and drainage plane (as applicable).

Want to become familiar with BPI requirements to become certified? Each component includes both the knowledge required and the actions required for that specific component

OKACAA Weatherization Hands-On Activities Within Curriculum

The “Table of Contents” will guide you to “worksheet” pages.

• OSHA Ladder Requirements	OSHA	Page 45
• List of Equipment Needed	Checklist	Page 46
• Equipment Calibration, Blower Machine	Checklist	Page 47
• Gas Leak Detector Calibration or Bump Test	General Knowledge	Page 48
• Combustion Gas Analyzer Calibration & O2 Sensor	General Knowledge	Page 48
• DG500, DG700, DG1000 Calibration	General Knowledge	Page 49
• Inventory Management	General Knowledge	Page 50-51
• Inventory Check Out Exercise and Key	Worksheet	Page 52-53
• Invoice/Receipt Processing, Questionable Costs	General Knowledge/ODOC	Page 54-55
• Effective Production Scheduling	General Knowledge	Page 56
• Job Scheduling Practice	Worksheet	Page 57
• Energy Auditor Process At-A-Glance	General Knowledge	Page 58
• Energy Auditor Checklist – Form 45	ODOC	Page 59
• QCI Process At-A-Glance	General Knowledge	Page 60
• Warranties – Form 48	ODOC	Page 61
• Client Satisfaction Form – Form 35	ODOC	Page 62
• State QA Monitoring Process Flow Chart	ODOC	Page 63

Hands-On Worksheets

Crew Leader Warehouse Material Sign Out Work Sheet

Date:

Crew Chief:

Truck Number:

Warehouse Manager:

Job Number:

For Example, Component 1
has a “Inventory Check-Out
Exercise”

Description	Unit Cost	Estimated Quantity	Amount Received	Amount Returned	Amount Installed	Cost
Cellulose (bags)	\$4.50	35	35	2		
Pipe wrap (feet)	\$0.20	20	20	5		
Tank jacket (kit)	\$20.00	1	1	0		
Roof vent (each)	\$12.00	6	6	2		
Weatherstrip (kit)	\$10.50	2	2	0		
Duct mastic (tub)	\$12.50	1	1	0.50		

Hands-On Worksheets

Common Calculations and Conversions

Square Feet Area = width x length
Square feet to square inches 1 sf = 144 sq. inches
Cubic feet to cubic inches 1 cf = 1728 cubic inches
Perimeter = length + length + width + width
Triangle Area = base x height x 0.5
Circle Area = 3.14 (pi) x vertical radius x horizontal radius
Area = 6 x width x height
= width x length x height
ss = BTU/hr = UA \triangle
f Water Column = 248.84 Pascal's
ACH (CFM x 60 min) ÷ _____ Volume of Room = _____ Air Changes per hour

Division

by a fraction is the same as multiplying by the reciprocal.

al of $\frac{1}{2}$ is $\frac{2}{1}$. $2 \div \frac{1}{2} = \underline{\quad}$.

whole numbers by fractions:

Divide 10 by $\frac{1}{2}$. $1 \div 2 = .5$, so $10 \div .5 = 20$

2 by $\frac{1}{4}$ = _____

by $\frac{1}{4}$ = _____

Divide 10 by $\frac{1}{8}$ = _____

Divide 1 by $\frac{3}{8}$ = _____

Dividing fractions by fractions:

Example: Divide $\frac{3}{4}$ by $\frac{1}{2}$ $\frac{3}{4} \div \frac{1}{2} = \frac{3}{4} \times \frac{2}{1} = \frac{6}{4} = \frac{3}{2} = 1 \frac{1}{2} = 1.5$ Hint: $\frac{3}{4} = 0.75$, $0.75 \times 2 = 1.5$

Divide $\frac{3}{4}$ by $\frac{1}{4}$ = _____

Divide $\frac{1}{2}$ by $\frac{1}{4}$ = _____

Divide $\frac{3}{4}$ by $\frac{1}{4}$ = _____

Divide $\frac{3}{8}$ by $\frac{1}{4}$ = _____

Energy Bill Averaging:

Example -

1. Gather previous 12 months of utility bills
2. Add the 3 lowest bills together
3. Divide that total by 3 (This equals your Average)
4. Multiply your Average by 12 (This equals your Monthly Average)
5. Add Bill kWh together.
6. Divide your Monthly Average by total Bill kWh

$$\begin{array}{rcl} 442 + 522 + 538 & = & 1,502 \\ 1,502 \div 3 & = & 501 \\ 501 \times 12 & = & 6,012 \\ 6,012 \div 19,631 & = & 31\% \end{array}$$

Unit Conversion Table						
	BTU	MmBtu	kWh	Therm	CCF	#2 Fuel Oil
1 BTU =	1.00	0.000001	0.000293			140,000
1 MmBtu =	1,000,000	1.00	293.07	10.00		

Several components
have Calculations
and Conversions to
Practice

Role Requirements According to Job Titles

You can also study information to better equip yourself with knowledge and improve your skills!

Retrofit Installer Role

Lead Hazards:

Work Lead-Safe – Options:

- Receive EPA or DEQ (Oklahoma) Certified Renovator certification
- Training provided by Certified Renovator

OSHA: OSHA 10 Certification

Attic:

- Air seal attic floor
- Seal and dam high-temp heat sources in attic
- Prep attic floor for insulation
- Treat attic hatch
- Insulate attic floor and pass inspection the 1st time
- Insulate the ceiling of a manufactured home
- Seal and Insulate Knee Walls
- Install dense-pack sidewall insulation

Walls:

- Insulate the walls of a manufactured home

You're not sure what DOE or ODOC requires according to your job title? You can find it in Component 1!

National and State Policy and Guidance

Pre-Wx: Determining Client Energy Usage *Energy Auditors, QCI's*

ODOC Req. 301: Who is identified as a “high residential energy user” or “households with a high energy burden.”

i. The subgrantee recipient shall use \$1,600 as the median/average annual level of energy expenditures (both gas and electric) for eligibility determination, *(based on ONG average of \$864.35 for a 12-month period ending December 2010, and average cost of \$757.20 for municipal utilities annually (750 kWh)).*

“Households with a high energy burden”:

“Households with a high energy burden” identifies a low-income household whose energy cost exceeds income or ability to pay.

ii. Clients are eligible if **utility expenses exceed** the median or average level by 30% or **\$2080**;

- Calculate **one years' worth of gas and electric bills**.

- To be eligible the total of these bills must exceed the median average of \$1,600 by 30% (\$2,080).

For example: The Jones family is requesting assistance as a “household with a high energy burden.” The family has an average electric bill of \$120 and an average gas bill of \$60 annually. Calculate $(\$120 + \$60) \times 12 = \$2,160$. This family is eligible because their annual utility expense is in excess of the median average by 30% or \$80 ($\$2,160 - \$2,080$).



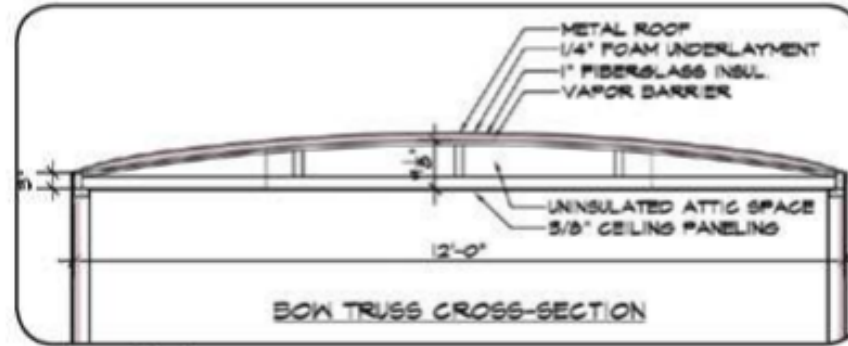
You're not sure what DOE or ODOC rules are? You can find both national and state guidance in every component!

Step by Step Installation Instructions

Insulating the Mobile Home Roof:

(courtesy of <http://www.e3a4u.info/energy-technologies/mobile-home-energy/step-8-insulating-the-roof/>)

Most early mobile homes have only 1 inch of fiberglass insulation in the roof cavities. The early roofs used a lightweight bow truss, a layer of insulation over the trusses with a sealed metal roof. The cavity under the insulation was usually left un-insulated. During the energy audit, the auditor will check to see how much insulation is in the roof cavity. A lot of mobiles have rounded "bow truss" roofs that are deeper in the center compared to next to the outside walls.



Source: Jim Baerg

Determine Existing Insulation Depth: The depth of insulation is tested by drilling a small hole in the ceiling in the center (closet, if possible) and one near the outside walls. The cavity is probed to find the depth of insulation in each spot and how much space is available for filling with insulation.

Flues: Any gaps to the interior from the furnace and water heater flues must be sealed by installing a metal shield using screws and high temperature caulk. Within the attic, shields are installed around the flues (if necessary) to keep the insulation away from the flues. Shields are replaced, as necessary.

Insulating Options: There are three principal options; interior blow, edge b

- **Option 1 - Interior** The most important consideration is that this method doesn't damage the metal roof, so future roof leaks are minimized. Insulation is blown into the attic cavity from holes drilled along a line at the center of the ceiling.
 - The contractor will mark the center at each end of the room and snap a line along the center of the mobile home.
 - The contractor will locate each truss along that center line and place a mark on the ceiling centered between each truss.

You're not sure how to install a measure correctly? Within the building components, there are step by step installation instructions!

Retrofit Installer Badges

• Baffles and Fire-Resistant Chemicals	General Knowledge	
• Knee Wall Insulation	General Knowledge	
• Spray Foam Insulation	General Knowledge	
• Mobile Home - Insulating a Roof	General Knowledge	
• Attic Inspection Checklist	Worksheet	
• Retrofit Installer Badge "Insulate the ceiling of a manufactured home"	DOE/NREL	
• Retrofit Installer Badge "Air seal attic floor"	DOE/NREL	
• Retrofit Installer Badge "Seal and dam high-temp heat sources in attic"	DOE/NREL	Page 38
• Retrofit Installer Badge "Prep attic floor for insulation"	DOE/NREL	Page 39
• Retrofit Installer Badge "Treat attic hatch"	DOE/NREL	Page 40
• Retrofit Installer Badge "Insulate attic floor and pass inspection the 1st time"	DOE/NREL	Page 41
• Retrofit Installer Badge "Seal and Insulate Knee Walls"	DOE/NREL	Page 42
• Retrofit Installer Badge "Install Exterior Roof Penetration"	DOE/NREL	Page 43

Every Component has relevant Retrofit Installer Badges listed in the table of contents, if applicable to that component. The badges are always located at the end of the component section.

Retrofit Installer Badges

Windows - Repair/replace cracked or broken glass

Desired Outcome: Glass complete and intact; improved energy efficiency performance of fenestration²

Task 1: In pre-1978 windows, presence of lead is assumed unless testing proved otherwise and work was completed accordingly.

Task 2: Replacement glass is sized correctly for the opening.

Task 3: Replacement glass selected matches original in color and l

Task 4: Replacement glass meets local code requirements (e.g., te

Task 5: Glass is durably fastened to frame (stops or push points).

Task 6: Opening was cleaned adequately to allow adhesion of sealant.

Task 7: Glass is sealed according to design (e.g., glazing, glazing tape or other) to prevent air movement.

Some skills you may be able to practice or study from home. DOE Retrofit Installer Badges can help with doing that! Each Badge provides a step by step process to verify installer knowledge and qualifications.

Practice Quizzes

Test Your Asbestos Knowledge!

1. Asbestos wall shingles were popular in the United States during what period?
 - A. 1920's through 1960's
 - B. 1940's through 1960's
 - C. Any time prior to 1978
2. Asbestos in transite chimneys was phased out when?
 - A. By the 1980's
 - B. 1978
 - C. 1972
3. What Personal Protective Equipment (PPE) should be worn when working in areas that may contain damaged or friable asbestos?
 - A. A N-100 respirator and gloves
 - B. Safety glasses and protective shoes
 - C. A N-95 respirator, and gloves
4. Many chimney flues, exhaust pipes from fireplaces, were lined with a material called transite. What is transite?
 - A. metal chimney liners
 - B. plaster chimney liners
 - C. asbestos-containing cement material
5. What type of asbestos is considered the most hazardous?
 - A. Friable Asbestos
 - B. Non-friable Asbestos
6. DOE rules prohibit certain work practices when dealing with asbestos. Which one of the following is prohibited by the DOE rules?
 - A. Replacing asbestos siding
 - B. Hiring a certified asbestos tester to test the location of suspected asbestos
 - C. Removing asbestos from a 2' x 2' location
7. ODOC rules allow for blower door testing with the presence of suspected asbestos containing materials, under what circumstances?
 - A. If the suspected asbestos containing material is not damaged in any way
 - B. If a pressurized blower door test is conducted
 - C. Under no circumstances if there is suspected asbestos containing material in the home

There are also Quizzes available to challenge your knowledge!

OKACAA Weatherization Hands-On Activities Within Curriculum

Working from home is a perfect opportunity for those workers who would like to advance but do not have the knowledge yet.

By accessing all of the trainings available in this webinar, as well as the OKACAA Curriculum, there is an opportunity to learn all aspects of the weatherization requirements, from Energy Auditors, to QCI's, to Installer's!

Are there any Questions concerning OKACAA Curriculum?

4.

MSU Weatherization Training Center (WxTV)



Not secure

www.weatherization.org

Start Here

MSU Extension / Weatherization

Montana Weatherization Training Center



Montana Weatherization Training Center

HOME

TRAINING CALENDAR AND
REGISTRATION

ALL COURSES

WEATHERIZATION PROGRAM
COURSES

The Montana Weatherization Training Center is located in beautiful Bozeman, Montana. We've provided training and technical assistance to the housing industry since 1991.

We deliver courses to field technicians, business owners, and program managers on topics that include energy efficiency, renewable energy, and health and safety. The Center includes fully-equipped classrooms, training labs, and field-testing facilities that allow us to deliver courses across a range of knowledge domains. We focus on hands-on training whenever possible, following a clear mission to support and improve the day-to-day performance of installers and technicians in the field.



The Training Center is an approved Test Center for the Building Performance Institute (BPI). We provide online examinations for all BPI certifications, and can proctor field examinations for the Energy Auditor, Quality Control Inspector, Building Analyst, Heating Professional, and Envelope Professional certifications.



MSU Weatherization Training Center (WxTV)

Montana Weatherization
Training Center

HOME

TRAINING CALENDAR AND
REGISTRATION

ALL COURSES

WEATHERIZATION PROGRAM
COURSES

CONTINUING EDUCATION UNITS
(CEU)

OUR STAFF

LOCATION

EPA: RENOVATION, REPAIR, &
PAINTING RULE

DOWNLOADABLE RESOURCES

HVAC TOOLS

CONSUMER ENERGY TIPS

WxTV FEATURED

WxLIVE

HEALTHY HOMES



This training does not cover ODOC policy and procedure.
Please reach out to ODOC or OKACAA with any questions
regarding policy and procedure.

Navigate down on the left hand side
and select “WxTv FEATURED” or
“WxLIVE” options.



WxLive

As we prioritize the safety and health of Weatherization workers across the country, we are hosting weekly live shows. Join us Fridays at 9am MDT to check out tips and tricks of the trade with the staff at the Montana Weatherization Training Center. This show is broadcast live from beautiful Bozeman, MT.

DOWNLOADABLE RESOURCES

HVAC TOOLS

CONSUMER ENERGY TIPS

WxTV FEATURED

WxLIVE

HEALTHY HOMES

Weatherization Training Schedule						
Today	◀	▶	April 2020	Print	Week	Month
Sun	Mon	Tue	Wed	Thu	Fri	Sat
29	30	31	Apr 1	2	3	4
	(1:00pm) Postponed: Retrofit Installer Technicia				Sam Friday L	
5	6	7	8	9	10	11
	(1:00pm) Postponed: Energy Auditor & Written				Sam Friday L	
12	13	14	15	16	17	18
	Postponed: Energy Auditor Field Exi				Sam Friday L	
19	20	21	22	23	24	25
			12pm Health		Sam Friday L	
26	27	28	29	30	May 1	2
			12pm Health			
Events shown in time zone: Mountain Time - Denver						
+ Google Calendar						

WxTV offers live videos on Friday mornings at 10:00 A.M. CST.

To access these, you can click the calendar or click the link from the left side of the <http://www.weatherization.org/> homepage.

WxTV Live

The website provides instructions for use, live chat, and has archives to see previous videos you may have missed.

Instructions

If you're looking for the weekly Live webinar, you've made it to the right place!

The video above will go live at 9 a.m. MT on Friday, April 17th. You can view from this screen as-is or click on the 4-arrows icon on the lower right to go full-screen.

To participate in the chat, the easiest way is to choose "Chat as a Guest" below the buttons used to sign in via Vimeo or Facebook. You will write in your name, accept the Terms of Service, click "Join," and then you will be able to see messages from us and other people. This is where you can add your questions or comments for us during the live stream. We will be present to answer questions!

If you would like to view this video directly through Vimeo, head to <https://vimeo.com/event/30018>. There, you will need to ensure that you are in Full Screen mode, or make sure the window is stretched wide, to view the chat on the right-hand side of the screen.

Chat is NOT available on mobile, except through the Vimeo app.

Schedule

March 27th: Trainable Moments

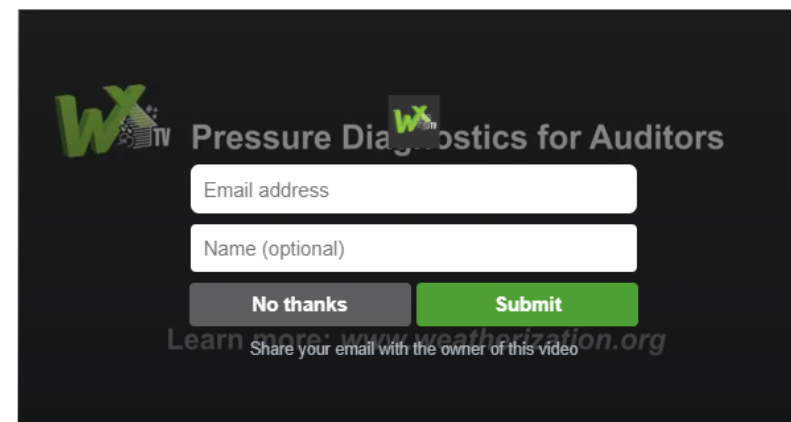
April 3rd: Doors and Windows for Crews

April 10th: Pressure Diagnostics for Auditors

April 17th: Combustion Testing for Crews

April 24th: Dense Pack Insulation for Crews

Missed last weeks episode? Watch below!



The screenshot shows a video player interface with a dark background. At the top left is the 'wxTV' logo. The title 'Pressure Diagnostics for Auditors' is displayed in white. Below the title are two input fields: 'Email address' and 'Name (optional)'. At the bottom are two buttons: 'No thanks' (grey) and 'Submit' (green). A small text at the bottom reads 'Learn more: www.weatherization.org' and 'Share your email with the owner of this video'.

WxTV FEATURED

You can use this website to view training videos by featured videos or playlists. The playlists are organized by topics.

MSU Extension / Weatherization / WxTV

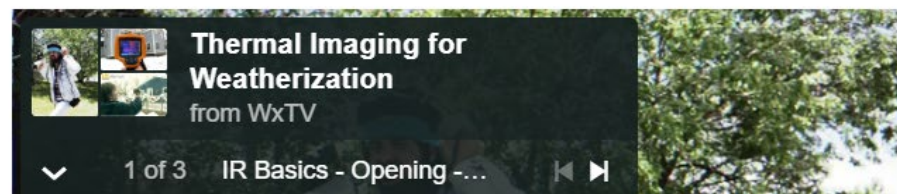
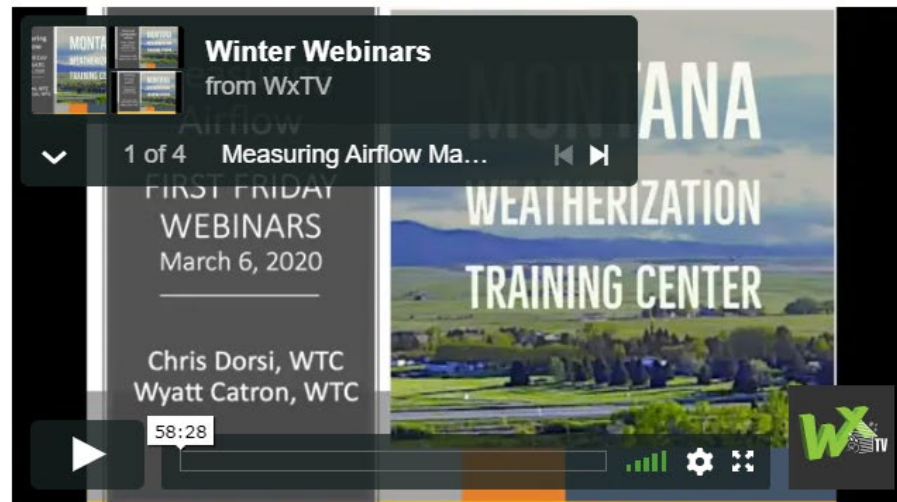
WxTV

Your Source for Weatherization and Home Performance Content

For more WxTV Content [check out the original WxTV online](http://wxtvonline.org/)

Select this link to go to the WxTV website,
<http://wxtvonline.org/>

Featured Playlists

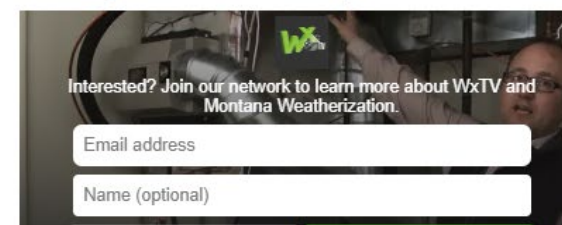


Featured Videos

Retrotec Blower Door Quick Tutorial



Heating Basics: A Tour of 9 Systems



WxTV Online



Select this link to go to the WxTV website,
<http://wxtvonline.org/>

You can use this website to view training videos and various playlists. The playlists are organized by topics.

This website is a valuable source of information on many topics.

Are there any
WxTV
Online Training
Questions?

5.

NASCSP WAP Training Resources



<https://nascsp.org/wap/waptac/>

Start Here

Weatherization Assistance Program Technical Assistance Center (WAPTAC)



The webpage will look like this. Use the tabs at the right to view the various tools and resources.



Program Guidance



WAP Network Resources

WAP

WAP Training Services

> Weatherization Assistance Program
Technical Assistance Center (WAPTAC)

Program Guidance

WAP Network Resources

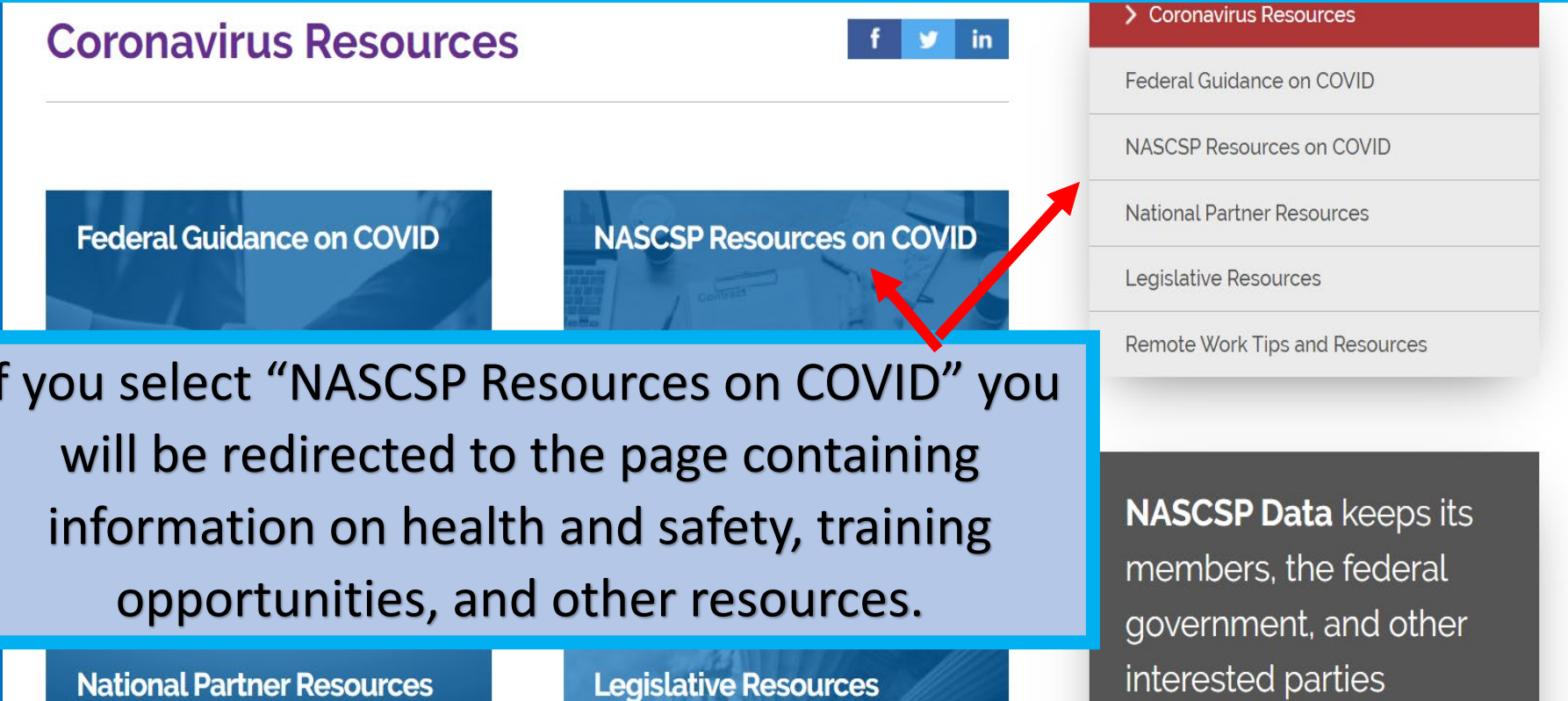
DOE Trainings & Tools

Regulations

Weatherization Training Centers

This website can be utilized as a resource for trainings and information about WAP on the federal level.

NASCSP also provides resources for situations during COVID-19 on the webpage <https://nascsp.org/coronavirus-resources/>.



The screenshot shows the 'Coronavirus Resources' page on the NASCSP website. At the top, there's a header with the title 'Coronavirus Resources' and social media icons for Facebook, Twitter, and LinkedIn. Below the header, there are two main buttons: 'Federal Guidance on COVID' and 'NASCSP Resources on COVID'. A red arrow points from the text box to the 'NASCSP Resources on COVID' button. To the right of these buttons is a sidebar menu titled '> Coronavirus Resources' which lists several categories: 'Federal Guidance on COVID', 'NASCSP Resources on COVID', 'National Partner Resources', 'Legislative Resources', and 'Remote Work Tips and Resources'. At the bottom of the page, there are more buttons for 'National Partner Resources' and 'Legislative Resources'. A dark grey box on the right side of the page contains the text: 'NASCSP Data keeps its members, the federal government, and other interested parties'.

Coronavirus Resources

Federal Guidance on COVID

NASCSP Resources on COVID

If you select “NASCSP Resources on COVID” you will be redirected to the page containing information on health and safety, training opportunities, and other resources.

NASCSP Data keeps its members, the federal government, and other interested parties

National Partner Resources

Legislative Resources

This is a valuable tool to find all things related to COVID-19 during this time. It has resources from several federal partners.

NASCSP WAP and DOE Learning Opportunities

WAP

[NASCSP Weatherization Q & A](#) (Updated 4-2-20)

[Strategies & Tips for Continuing Operations During Suspended Production](#)

This document has suggested activities for crew members, tips about uses of T&TA funds, as well as additional meeting and project ideas during suspended WAP production.

[Weatherization Online Training Opportunities](#) (Excel)

Compiled by DOE and the WAP Trainers Consortium

[WAP Administrative Training Online Modules](#) | Other DOE [online trainings](#)

[BPA Virtual Conference](#)

NASCSP WAP and DOE Resources

WAP

[COVID Resources for Contractors](#)-A new resource from the DOE EERE Home Performance with ENERGY STAR program containing a summary of the relief available from the U.S. Small Business Administration and other resources for Home Performance Contractors.

LIHEAP Resources

[State LIHEAP Agencies Actions to Respond to the COVID-19 Pandemic](#) (NEADA)

[LIHEAP One-Pager](#) (NEUAC)

Safety Protocols

[Considerations for WAP Field Work](#) (NASCSP)

Additional State Samples available on NASCSP [Member Portal](#)

NASCSP WAP and DOE Resources

WAP

National Association of Home Builders (NAHB)

[Poster of Protection Measures](#)

[Jobsite Safety Toolbox Talk](#)

[Additional Resources in English and Spanish](#)

[OSHA Guidance on Preparing Workplaces for COVID-19](#)

Potential screening tools for workers and clients

[Emory University- “Check your risk for COVID-19”](#)

[Wisconsin Department of Health](#)


**Are There Any Questions
About the NASCSP WAP and
DOE Training Resources?**

6.

BPI Resources

The screenshot shows the BPI website interface. At the top, there is a navigation bar with the BPI logo on the left and several links: STANDARDS, CERTIFIED PROFESSIONALS, BPI GOLDSTAR CONTRACTORS, BPI TEST CENTERS, BPI RATERS, and PRODUCT LISTING. Below this, a dropdown menu is open, displaying four categories of certifications: PRIMARY, CORE, MULTIFAMILY, and ADVANCED. Each category has a list of specific roles or services. The PRIMARY category includes Air Leakage Control Installer and Infiltration and Duct Leakage. The CORE category includes AC and Heat Pump, Building Analyst, Envelope Professional, Heating Professional, and Manufactured Housing. The MULTIFAMILY category includes Multifamily Building Analyst and Multifamily Building Operator. The ADVANCED category includes Crew Leader, Energy Auditor, Healthy Home Evaluator, Quality Control Inspector, and Retrofit Installer Technician. The background of the website features a wooden surface and the text 'BPI GoldStar Contractor'.

← → ↺ 🏠 ⓘ www.bpi.org **Start Here**

 STANDARDS CERTIFIED PROFESSIONALS BPI GOLDSTAR CONTRACTORS BPI TEST CENTERS BPI RATERS PRODUCT LISTING

PRIMARY	CORE	MULTIFAMILY	ADVANCED
Air Leakage Control Installer	AC and Heat Pump	Multifamily Building Analyst	Crew Leader
Infiltration and Duct Leakage	Building Analyst	Multifamily Building Operator	Energy Auditor
	Envelope Professional		Healthy Home Evaluator
	Heating Professional		Quality Control Inspector
	Manufactured Housing		Retrofit Installer Technician

BPI GoldStar Contractor

This website can be utilized as a resource for trainings and information about BPI Certifications and Knowledge Requirements

BPI Standards



www.bpi.org/standards/current-standards

Current BPI Standards

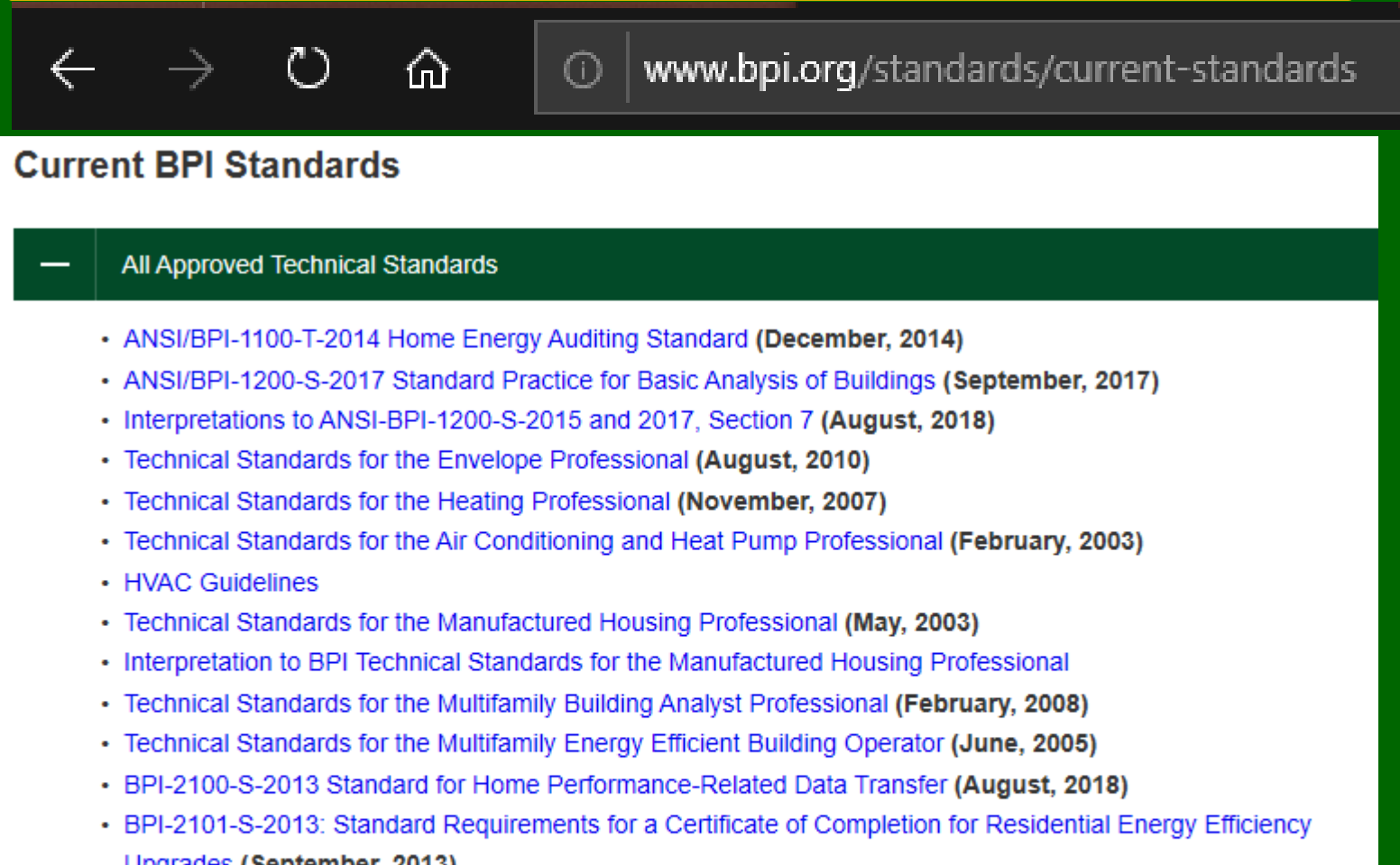


All Approved Technical Standards

- [ANSI/BPI-1100-T-2014 Home Energy Auditing Standard \(December, 2014\)](#)
- [ANSI/BPI-1200-S-2017 Standard Practice for Basic Analysis of Buildings \(September, 2017\)](#)
- [Interpretations to ANSI-BPI-1200-S-2015 and 2017, Section 7 \(August, 2018\)](#)
- [Technical Standards for the Envelope Professional \(August, 2010\)](#)
- [Technical Standards for the Heating Professional \(November, 2007\)](#)
- [Technical Standards for the Air Conditioning and Heat Pump Professional \(February, 2003\)](#)
- [HVAC Guidelines](#)
- [Technical Standards for the Manufactured Housing Professional \(May, 2003\)](#)
- [Interpretation to BPI Technical Standards for the Manufactured Housing Professional](#)
- [Technical Standards for the Multifamily Building Analyst Professional \(February, 2008\)](#)
- [Technical Standards for the Multifamily Energy Efficient Building Operator \(June, 2005\)](#)
- [BPI-2100-S-2013 Standard for Home Performance-Related Data Transfer \(August, 2018\)](#)
- [BPI-2101-S-2013: Standard Requirements for a Certificate of Completion for Residential Energy Efficiency Upgrades \(September, 2013\)](#)

This website can be utilized as a resource for trainings and information about BPI Standards

BPI Reference Sheets and Technical Documents



The screenshot shows a web browser interface. The address bar displays the URL www.bpi.org/standards/current-standards. Below the address bar, the page title is "Current BPI Standards". A dark green header bar contains a minus sign icon and the text "All Approved Technical Standards". Below this header, a list of standards is displayed in blue text, each followed by its approval date in parentheses. The list includes:

- [ANSI/BPI-1100-T-2014 Home Energy Auditing Standard](#) (December, 2014)
- [ANSI/BPI-1200-S-2017 Standard Practice for Basic Analysis of Buildings](#) (September, 2017)
- [Interpretations to ANSI-BPI-1200-S-2015 and 2017, Section 7](#) (August, 2018)
- [Technical Standards for the Envelope Professional](#) (August, 2010)
- [Technical Standards for the Heating Professional](#) (November, 2007)
- [Technical Standards for the Air Conditioning and Heat Pump Professional](#) (February, 2003)
- [HVAC Guidelines](#)
- [Technical Standards for the Manufactured Housing Professional](#) (May, 2003)
- [Interpretation to BPI Technical Standards for the Manufactured Housing Professional](#)
- [Technical Standards for the Multifamily Building Analyst Professional](#) (February, 2008)
- [Technical Standards for the Multifamily Energy Efficient Building Operator](#) (June, 2005)
- [BPI-2100-S-2013 Standard for Home Performance-Related Data Transfer](#) (August, 2018)
- [BPI-2101-S-2013: Standard Requirements for a Certificate of Completion for Residential Energy Efficiency Upgrades](#) (September, 2013)

This website can be utilized as a resource for trainings and information about BPI Standards

BPI Product Listing



www.bpi.org/product-listing

AIR PRESSURE BALANCING

Perfect Balance Return Air Pathway

Manufacturer: **Tamarack Technologies, Inc.**

Our Patented In-Door RAP has a specially designed baffle material to mitigate sound & light. Perfect Balance is easy to install and can be painted if necessary. Durable with a Lifetime Guarantee.

Standards/Protocols

ANSI/BPI-1200-S-2017 Standard Practice for Basic Analysis of Buildings, Technical Standards for the Heating Professional, Technical Standards for the Air Conditioning and Heat Pump Professional

[LINK TO PRODUCT](#)



Product Categories

- Air Pressure Balancing
- Attic Access Barrier
- Diagnostic
- Duct Sealing
- Indoor Air Quality
- Installation
- Plug Load Management
- Thermal Insulation
- Ventilation
- Windows

This website can be utilized as a resource for recommended products used to install various weatherization measures.

BPI CEU Opportunities



<https://exams.bpi.org/site/en/ce/search>

Search Opportunities for CEUs



Classroom Training
and Technical Conference Classes



Online Training
and Webinars

Classroom Training

55

Technical Conference Classes

0

Webinars

8

Online Training

613

BPI considers classroom trainings that align with BPI Standards and Testing Knowledge Lists to be educational sessions in which the

Specific training sessions at technical conferences that align with BPI Standards and Testing Knowledge Lists will be granted CEU credit(s). Candidates cannot get credit

BPI defines webinars that align with BPI Standards and Testing Knowledge Lists as those in which

In order to get credit for online training that align with BPI Standards and Testing Knowledge Lists, you need

This website can be utilized as a resource for obtaining CEU's needed to attempt BPI online or field exam pre-requisites.

7 Upcoming BPI Webinars



<https://exams.bpi.org/site/en/ce/search/index/type/5>

05/05/2020	Building Effective Management Skills BPI GoldStar Contractor Webinars http://www.bpi.org/goldstar_webinars.aspx	Emily Saunders 877-274-1274 esaunders@bpi.org	1.50
05/19/2020	The Changing World of Reviews BPI GoldStar Contractor Webinars https://www.bpi.org/goldstar_webinars.aspx	Emily Saunders 5189374521 esaunders@bpi.org	1.50
05/22/2020	COMMERCIAL: 2018 IECC Sneak Peek Performance Systems Development of New York, LLC (PSD) - BPI Test Center https://www.eventbrite.com/e/2018-iecc-commercial-updates-commercial-building-systems-commissioning-ticket-s-101745668032	Brandon Cornell 215-498-6421 bcornell@psdconsulting.com	1.00
05/27/2020	COMMERCIAL: What Makes an Effective Commercial Air Barrier – It's the Details Performance Systems Development of New York, LLC (PSD) - BPI Test Center https://www.eventbrite.com/e/res-equipment-sizing-manual-j-and-s-com-air-barriers-the-details-tickets-101749106316	Brandon Cornell 2154986421 bcornell@psdconsulting.com	1.00
05/27/2020	RESIDENTIAL: HVAC Sizing: Manuals J and S Performance Systems Development of New York, LLC (PSD) - BPI Test Center https://www.eventbrite.com/e/res-equipment-sizing-manual-j-and-s-com-air-barriers-the-details-tickets-101749106316	Brandon Cornell 215-498-6421 bcornell@psdconsulting.com	1.00
06/09/2020	Better Thinking, Better Results (Part One) BPI GoldStar Contractor Webinars http://www.bpi.org/goldstar_webinars.aspx	Emily Saunders 5188992727 esaunders@bpi.org	1.50
06/23/2020	Better Thinking, Better Results (Part Two) BPI GoldStar Contractor Webinars http://www.bpi.org/goldstar_webinars.aspx	Emily Saunders 5188992727 esaunders@bpi.org	1.50

613 Upcoming BPI Online Trainings – Some of these are free, while others cost to enroll



<https://exams.bpi.org/site/en/ce/search/index/type/4>

1 - 50 of 613 / Page 1 of 13

First | Previous | 1 2 3 4 5 6 7 8 9 10 | [Next](#) | [Last](#)

Training Information	Contact	#CEUs
Combustion Safety Non Whole-house Training South Middlesex Opportunity Council/Green Jobs Academy - BPI Test Center http://smoc.org/GJA_Calender.php	Gwenn O'Keefe 5086202679 gokeefe@smoc.org	0.50
Door Selection Non Whole-house Training South Middlesex Opportunity Council/Green Jobs Academy - BPI Test Center http://smoc.org/GJA_Calender.php	Gwenn O'Keefe 5086202679 gokeefe@smoc.org	0.60
Duct Insulation Non Whole-house Training South Middlesex Opportunity Council/Green Jobs Academy - BPI Test Center http://smoc.org/GJA_Calender.php	Gwenn O'Keefe 5086202679 gokeefe@smoc.org	0.50
Duct Air Sealing Non Whole-house Training Saturn Resource Management Inc. - BPI Test Center https://www.srmi.biz/continuing-education/bpi	Darrel Tenter (406) 443-3433 ext 116 darrel@srmi.biz	0.80

**Are There Any Questions
About the BPI Resources?**

7.

YouTube Training Videos

- How a Heat Pump Works | This Old House

<https://www.youtube.com/watch?v=GE8NclwszKA>

- What Germany Can Teach Us About Home Energy | Ask This Old House

<https://www.youtube.com/watch?v=wtDbfV5dsNs>

- Net-Zero 101 - The secret of building super energy efficient net-zero homes

<https://www.youtube.com/watch?v=qAJlandP5c0>

- Weatherization: Attic Air Sealing

<https://www.youtube.com/watch?v=GeZWHTT4D4Y>

YouTube Training Videos, continued

- Building Science Insights: To Vent or Not to Vent

<https://www.youtube.com/watch?v=Ld8pzlu45F8>

- Attic Insulation Done Wrong... and How to Do It Right!

<https://www.youtube.com/watch?v=fB6CbJsb1FM>

- Passive House = 90% Home Energy Reduction!

https://www.youtube.com/watch?v=Hz6qomFM_dw

- Study on Vented vs. Sealed Crawl Spaces

https://www.youtube.com/watch?v=g7g_JkRMbQo

YouTube Training Videos, continued

- Mobile Home Audit: Estimating Existing Insulation

<https://www.youtube.com/watch?v=hqGlw2QaOzY&t=140s>

- Waterproof Window Installation with Rick Arnold

<https://www.youtube.com/watch?v=ycdgjUZf0H0>

- How to Flash a Window | This Old House

<https://www.youtube.com/watch?v=DGmLFvZ7Jg0>

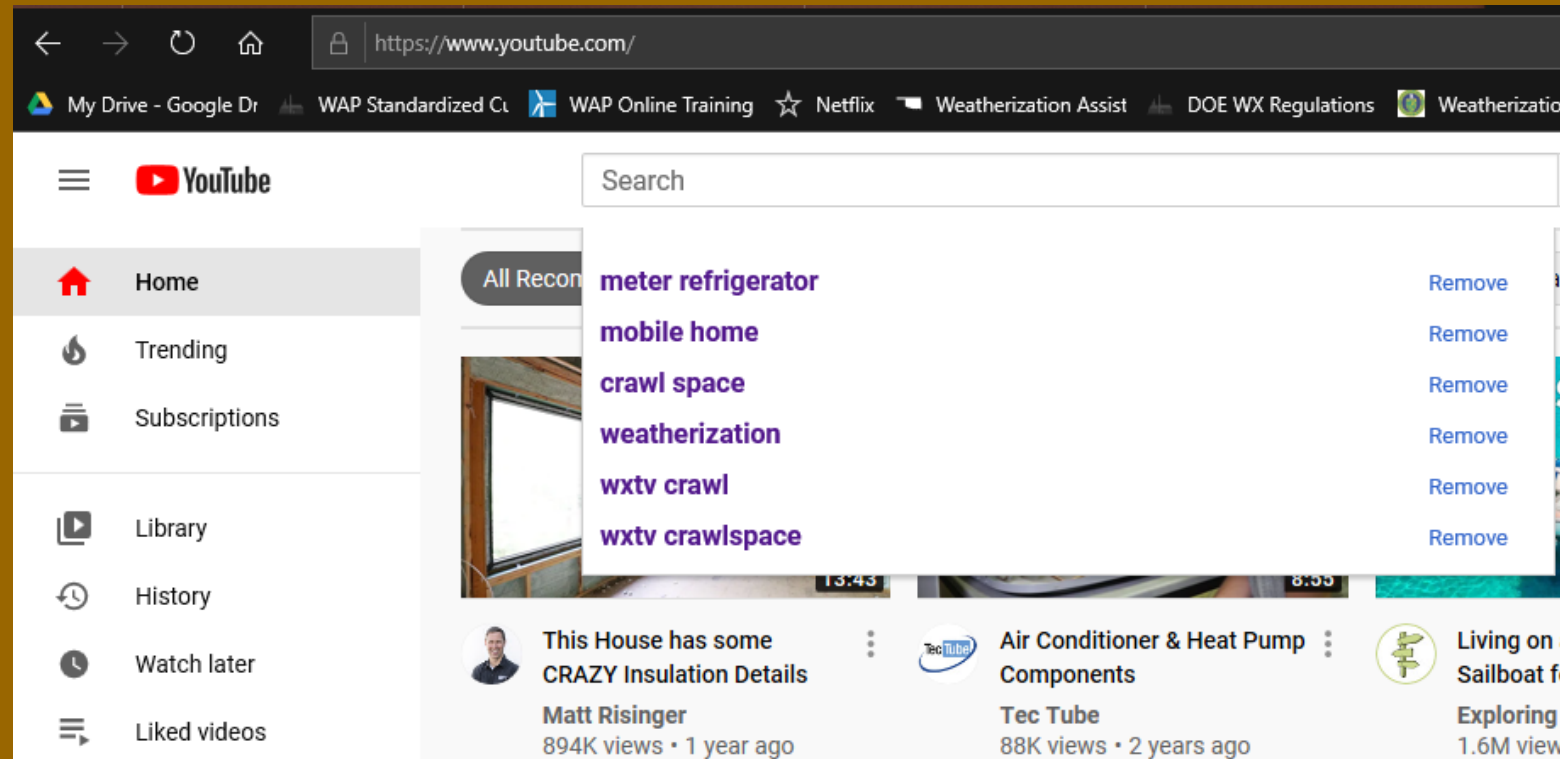
- Refrigerator: How Much Electricity Power Does It Use?

<https://www.youtube.com/watch?v=huhL1lesWl0>

Want More Weatherization Videos?

Searching for YouTube Videos made easy:

First, go to www.youtube.com, then use the search bar, as seen below:



**Are There Any Questions
About YouTube Videos?**

Thank You For Attending



WAP Trainings Available During
COVID-19
And
How to Utilize These Trainings

We Are All In This Together!